SEQUENCE LISTING

<110> Hillyard, Jeanna
Roberts, James
Ye, Minwei

<120> Cotton Event PV-GHBK04 (757) and Compositions and Methods for Detection Th
ereof

<130> 38-21 (52288)B

<140> 09/990,659
<141> 2001-11-16

<150> US60/249,757
<151> 2000-11-17

<160> 21

<170> PatentIn version 3.0

<210> 1
<211> 20
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> a 5' genome-insert junction nucleotide sequence which is/is compl
ementary to a sequence diagnostic for nucleic acids derived from
the cotton event 757 recombinant genome

<400> 1
gtttgcttgg acactgatag 20

<210> 2
<211> 20
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> a 3' genome-insert junction nucleotide sequence which is/is compl
ementary to a sequence diagnostic for nucleic acids derived from
the cotton event 757 recombinant genome

<400> 2
aaacccttttc tggaaaaata 20

<210> 3
<211> 20
<212> DNA
<213> Gossypium hirsutum

<220>
<221> misc_feature
<222> (1)..(20)

<400> 3
tgttctgtgg aaaaggaagg 20

<210> 4
<211> 20
<212> DNA
<213> Gossypium hirsutum

<220>
<221> misc_feature
<222> (1)..(20)

<400> 4
atgcctgcag gtcaattcaa 20

<210> 5
<211> 138
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(138)
<223> part of a 5' non-functional sequence inserted into the cotton genome in cotton event 757

<400> 5
acactgatag tttaaactga aggcgggaaa cgacaatctg atcccagctt gcatgcctgc 60

aggtcaattc aatattgtgg caggacattg ctacatgata cctcttagaa ttgtttagac 120

ttcagatcga tcttgtca 138

<210> 6
<211> 767
<212> DNA
<213> Gossypium hirsutum

<220>
<221> Unsure
<222> (1)..(767)
<223> 5' cotton (Gossypium hirsutum) genome sequence

<400> 6
gtcccggggg cttatcctgt attcatttgc acccacataa acagccaaat taaccaaacc 60

catattcaac tgaaactccc aaagccattc ctactttagc ttttcaccca ctaactcaaa 120

agaaaacact cacctagctt ctttgctttt tcttttggat tgttttagat ctacaaaaag 180

atgattcaag aactccttgg aggttcttct tgcttaaact ttggagggga gaggaagatc 240

tccatcaatg gaagcatttt ggaaggaacc cccacttctt ctccatcacc atcatcttct 300

tcttcttcgg cgacgacttc atcgaccact aattcatcga atccggagaa tcatcaccag 360

aatttgaggt gccccaggtg tgattcctcc aacacaaagt tctgctatta caacaactac 420

aacctcactc agcctcgtca cttttgcaag acttgccgtc ggtattggac caaaggagga 480

gctctcagaa acgttcctat tggtggtggg tgtaggaaaa acaaaagcac tactggtgtt 540

tcaacatctc tggggaaatc aacttcttcc aagatgaaaa cagtagtttc tgaaattgga 600

agatctgggt tcgatcatga gcttcagtct actccaattc tttggacttc agcggcccag 660

acttcccatc ttctatccaa tctaacctca atgagagcta ccctaaaccc taaccctaac 720

acattgtcta accctgttag tattaaggaa gaagtgagtt tgcttgg 767

<210> 7
<211> 206
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(206)
<223> part of arbitrarily assigned 3′ end DNA sequence inserted into th
e cotton event 757 genome.

<400> 7
tgagggatca agccacagca gcccactcga ccttctagcc gacccagacg agccaaggga 60

tctttttgga atgctgctcc gtcgtcaggc tttccgacgt ttgggtggtt gaacagaagt 120

cattatcgca cggaatgcca agcactcccg aggggaaccc tgtggttggc atgcacatac 180

aaatggacga acggataaac cctttc 206

<210> 8
<211> 307
<212> DNA
<213> Gossypium hirsutum

<220>
<221> Unsure
<222> (1)..(307)
<223> 3′ cotton (Gossypium hirsutum) genome sequence

<400> 8
tggaaaaata atcaacacca cgctcaacaa caacagaata ataatgggtt ccttgtaggt 60

gaagttcaaa acacaggtat tcaagaactg tatcaaaggc tcaaatcatc atcaagttat 120

tactctgata cttcagcagt aattctaagc aatgtcgctt cttcttcatc aacatccatt 180

ttggagtcag ctccagttgc tgggggagaa ttgggttact ggaatccggc attttcatca 240

tcgtggtctg atcttccaac aactaatggt gcatatcctt aaaataaccc tttacctttc 300

gtttaat 307

<210> 9
<211> 26
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(26)
<223> 5' cotton (Gossypium hirsutum) genome PCR primer

<400> 9
gagagagata ggcactaaag taagca 26

<210> 10
<211> 28
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(28)
<223> 5' insert PCR primer

<400> 10
ttagacaaat tgtcacggtc taccagaa 28

<210> 11
<211> 24
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(24)
<223> 3' insert PCR primer

<400> 11
ttcccaacga tcaaggcgag ttac 24

<210> 12
<211> 27
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(27)
<223> 3' cotton (Gossypium hirsutum) genome PCR primer

<400> 12
ttgatgcact tacgaaagaa gaaccga 27

<210> 13
<211> 905
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(905)
<223> 5' cotton (Gossypium hirsutum) genome + insert sequence

<400> 13
gtcccggggg cttatcctgt attcatttgc acccacataa acagccaaat taaccaaacc 60

catattcaac tgaaactccc aaagccattc ctactttagc ttttcaccca ctaactcaaa 120

agaaaacact cacctagctt ctttgctttt tcttttggat tgttttagat ctacaaaaag 180

atgattcaag aactccttgg aggttcttct tgcttaaact ttggagggga gaggaagatc 240

tccatcaatg gaagcatttt ggaaggaacc cccacttctt ctccatcacc atcatcttct 300

tcttcttcgg cgacgacttc atcgaccact aattcatcga atccggagaa tcatcaccag 360

aatttgaggt gccccaggtg tgattcctcc aacacaaagt tctgctatta caacaactac 420

aacctcactc agcctcgtca cttttgcaag acttgccgtc ggtattggac caaaggagga 480

gctctcagaa acgttcctat tggtggtggg tgtaggaaaa acaaaagcac tactggtgtt 540

tcaacatctc tggggaaatc aacttcttcc aagatgaaaa cagtagtttc tgaaattgga 600

agatctgggt tcgatcatga gcttcagtct actccaattc tttggacttc agcggcccag 660

acttcccatc ttctatccaa tctaacctca atgagagcta ccctaaaccc taaccctaac 720

acattgtcta accctgttag tattaaggaa gaagtgagtt tgcttggaca ctgatagttt 780

aaactgaagg cgggaaacga caatctgatc ccagcttgca tgcctgcagg tcaattcaat 840

attgtggcag gacattgcta catgatacct cttagaattg tttagacttc agatcgatct 900

tgtca 905

<210> 14
<211> 513
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(513)
<223> 3' cotton (Gossypium hirsutum) genome + insert sequence

<400> 14
tgagggatca agccacagca gcccactcga ccttctagcc gacccagacg agccaaggga 60

tctttttgga atgctgctcc gtcgtcaggc tttccgacgt ttgggtggtt gaacagaagt 120

cattatcgca cggaatgcca agcactcccg aggggaaccc tgtggttggc atgcacatac 180

aaatggacga acggataaac cctttctgga aaaataatca acaccacgct caacaacaac 240

agaataataa tgggttcctt gtaggtgaag ttcaaaacac aggtattcaa gaactgtatc 300

aaaggctcaa atcatcatca agttattact ctgatacttc agcagtaatt ctaagcaatg 360

tcgcttcttc ttcatcaaca tccattttgg agtcagctcc agttgctggg ggagaattgg 420

gttactggaa tccggcattt tcatcatcgt ggtctgatct tccaacaact aatggtgcat 480

atccttaaaa taacccttta cctttcgttt aat 513

<210> 15
<211> 4973
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(4973)
<223> sequence of 5' flank to full-length cry1Ac coding region

<400> 15
cggcccagac ttcccatctt ctatccaatc taacctcaat gagagctacc ctaaacccta 60

accctaacac attgtctaac cctgttagta ttaaggaaga agtgagtttg cttggacact 120

gatagtttaa actgaaggcg ggaaacgaca atctgatccc agcttgcatg cctgcaggtc 180

aattcaatat tgtggcagga cattgctaca tgatacctct tagaattgtt tagacttcag 240

atcgatcttg tcagtctgaa agacccaaaa acaaatgcaa tttcttttct ggtagaccgt 300

gacaatttgt ctaagatgta tctgatttaa tgccttttgt atataataca ctcatctaat 360

ctagttaatt tagcttcaga gtaaattact tcagcatatt tatacgtgcc aagtgccaac 420

catatcaaat tagctaagca gacagttgaa gtacacaaaa caaaagcatc atatgctgat 480

ttatttattc atagatggag ctcaagtcat agttaaatag cccgatactt tcctcgctca 540

ctatgagcta ttacagcata cattttagta ctacatactt attcagtaaa aagccctcaa 600

aattgaagac aaaggacggg atccccgggt accgagctcg aattcaggcc tctagatctc 660

attattcctc catcaagaga agctccacgc tgtccacgat gaaggttccc tcggtttcac 720

cgatctcgat ccacactttg tcggtctcag gaaagtactc aagctccttg gtaacatagc 780

caactggaag tggtgtgtag tccctgtaac ctctgttgaa ctcgcaaggg ttctcacgtc 840

tgccatctgt gtaggatttc tcctcgtaca cggaggcata gtcagcagga acggaaggag 900

cttcgttgta acctctgtta cggctagtgt aggcacctcc gtactcttcc tgattcacag 960

tgtagtcgtt gcaagtaacg gtgttgttgg gatagatttc ttcctcgacg cagttggaga 1020

acttaagctc gtcggtgttg ttctcgatct cgtggatggt cacgcaaccc tcaccgtatc 1080

cctccttgta agcggtcaca cggagaatgt agcctctacc tggacagact ctaacctctt 1140

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ccacgtccac atgacctttc acattccagc agctgaggcc attgttgaag tcaccgttct 1260

tgatgacgtt tctggcatcg tacaaggaga atgcggtaaa gatacgtccc tcaagttcct 1320

cgaagatggc agcgttcaca ccagggatca cggacaactc aggcaagtaa gcctcacgaa 1380

tgctgtgcac acgtttgtct gcggcgtgga tcatggcgat gttggtgtcg gcttgcaact 1440

gatcatattg ggagttcacg aacaaagcat ccacggactc tttggcctcc ttgtaaacga 1500

tgttagtttc ccattcgagt ttctcacgtt tgtccctcca cttcttctct gctctcttca 1560

cacgagcgag agcttcaccg accaatggtt tctcttcgag aaactcaagg ttgccaagtc 1620

ttgcgtgtcc gtcttgggtc ttgatcttga agatgaccca gactccgagg tcctcattca 1680

ggtcagtaca tcccacatcg atgtccaagg agaagtgatg agaatggtgg gcacacttct 1740

cgccatccct gcaggagcag tccaagtcag gattccactc aaggtgtgga gcgcatctgt 1800

taggctctcc acacttccca atgggagatt gggcagaaag tggccagagg gaaccagtac 1860

ctgggacatt cacggtctcg tgcttggcat tgtacctgat cgagtagatt tcaaggtctt 1920

ggctgtcttc gatgtagcct ctaagttgat acctggtgaa ggctttgagt ttggactcat 1980

cgatcttctg gtacaagtag gtagggtagc actcgtcgaa agttccggag agggtgacgt 2040

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cacgttctgg ctgcctgttg atgtctttga agttggagtc ttgcaagaga ttcctctcgt 2160

cgctgagacg cttggcgtgt ttaactttct cggagagttc acgcttctcg tcgaggcaga 2220

actcatcgct aaggtaggtg accaagttgg acacttggtc aatgtgatag tcagtaacgt 2280

tagttttcaa gccaagctga ttggtggagg taaagagggc gttcacagcc ttctgggctc 2340

tctcaaggtt gtactcagcc tcgagtgttg cagtaactgg aatgaactcg aatctgtcga 2400

taatcactcc tgcagtccca ctaaagtttc taacacccac gatgttaccg agtgaagatg 2460

taaaagcatt ggcactttca aagtaaccga aatcgctgga ttggagatta tccaaggagg 2520

tagctgtagc tggaactgta ttggagaaga tggatgaatt accccaatta acgttgaggt 2580

gaataggggt cacagaagca tacctcacac gaactctata tctggtagat gtggatggga 2640

agtgaattgg aacttcaata taccctctat tctgaatgtt atttccactg ctgttgagtc 2700

taacgaggtc tccaccagtg aatcctggtc ctgaaatgac agaaccgttg aagagaaagt 2760

ttcccttcac tgcagggatt tgagtaatac tatcggatgc gatgatgttg ttgaactcag 2820

cactacgatg tatccaagag aacataggag ctctgatgat gctcacggaa ctgttgctga 2880

atccggaacg gaacatggac acgtggctca acctgtggga gaatccttgc ctgggtggca 2940

cattgttgtt ctgtggaaaa ggaaggtggc tcctacaaat gccatcattg cgataaagga 3000

aaggccatcg ttgaagatgc ctctgccgac agtggtccca aagatggacc cccacccacg 3060

aggagcatcg tggaaaaaga agacgttcca accacgtctt caaagcaagt ggattgatgt 3120

gatatctcca ctgacgtaag ggatgacgca caatcccact atccttcgca agacccttcc 3180

tctatataag gaagttcatt tcatttggag aggacacgct gacaagctga ctctagcaga 3240

tctccatgga caacaaccca aacatcaacg aatgcattcc atacaactgc ttgagtaacc 3300

cagaagttga agtacttggt ggagaacgca ttgaaaccgg ttacactccc atcgacatct 3360

ccttgtcctt gacacagttt ctgctcagcg agttcgtgcc aggtgctggg ttcgttctcg 3420

gactagttga catcatctgg ggtatctttg gtccatctca atgggatgca ttcctggtgc 3480

aaattgagca gttgatcaac cagaggatcg aagagttcgc caggaaccag gccatctcta 3540

ggttggaagg attgagcaat ctctaccaaa tctatgcaga gagcttcaga gagtgggaag 3600

ccgatcctac taacccagct ctccgcgagg aaatgcgtat tcaattcaac gacatgaaca 3660

gcgccttgac cacagctatc ccattgttcg cagtccagaa ctaccaagtt cctctcttgt 3720

ccgtgtacgt tcaagcagct aatcttcacc tcagcgtgct tcgagacgtt agcgtgtttg 3780

ggcaaaggtg gggattcgat gctgcaacca tcaatagccg ttacaacgac cttactaggc 3840

tgattggaaa ctacaccgac cacgctgttc gttggtacaa cactggcttg gagcgtgtct 3900

ggggtcctga ttctagagat tggattagat acaaccagtt caggagagaa ttgaccctca 3960

cagttttgga cattgtgtct ctcttcccga actatgactc cagaacctac cctatccgta 4020

cagtgtccca acttaccaga gaaatctata ctaacccagt tcttgagaac ttcgacggta 4080

gcttccgtgg ttctgcccaa ggtatcgaag gctccatcag gagcccacac ttgatggaca 4140

tcttgaacag cataactatc tacaccgatg ctcacagagg agagtattac tggtctggac 4200

accagatcat ggcctctcca gttggattca gcgggcccga gtttaccttt cctctctatg 4260

gaactatggg aaacgccgct ccacaacaac gtatcgttgc tcaactaggt cagggtgtct 4320

acagaacaaa cactgatagt ttaaactgaa ggcgggaaac gacaatctga tcccagcttg 4380

catgcctgca ggtcaattca atattgtggc aggacattgc tacatgatac ctcttagaat 4440

tgtttagact tcagatcgat cttgtcagtc tgaaagaccc aaaaacaaat gcaatttctt 4500

ttctggtaga ccgtgacaat ttgtctaaga tgtatctgat ttaatgcctt ttgtatataa 4560

tacactcatc taatctagtt aatttagctt cagagtaaat tacttcagca tatttatacg 4620

tgccaagtgc caaccatatc aaattagcta agcagacagt tgaagtacac aaaacaaaag 4680

catcatatgc tgatttattt attcatagat ggagctcaag tcatagttaa atagcccgat 4740

actttcctcg ctcactatga gctattacag catacatttt agtactacat acttattcag 4800

taaaaagccc tcaaaattga agacaaagga cgggatcccc gggtaccgag ctcgaattca 4860

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tccctcggtt tcaccgatct cgatccacac tttgtcggtc tcaggaaagt act 4973

<210> 16
<211> 19
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> 5' primer to 5' flanking sequence of SEQ ID NO: 15 from 8 to 26;

<400> 16
gacttcccat cttctatcc 19

<210> 17
<211> 19
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> 3'primer to partial e35S promoter of SEQ ID NO: 15 from 3154 to 3136

<400> 17
attgtgcgtc atcccttac 19

<210> 18
<211> 22
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(22)
<223> 5'primer to partial 3' cry1Ac sequence of SEQ ID NO: 15 from 2581 to 2603

<400> 18
gaataggggt cacagaagca ta 22

<210> 19
<211> 20
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> 3'primer to partial 5' cry1Ac sequence of SEQ ID NO: 15 from 3455 to 3435

<400> 19
ggaccaaaga taccccagat 20

<210> 20
<211> 19
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> 5'primer to partial e35S promoter of SEQ ID NO: 15 from 2993 to 3011

<400> 20
ataaaggaaa ggccatcgt 19

<210> 21
<211> 25
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(25)
<223> 3'primer to full-length cry1Ac sequence of SEQ ID NO: 15 from 497
3 to 4949

<400> 21
agtactttcc tgagaccgac aaagt 25

10